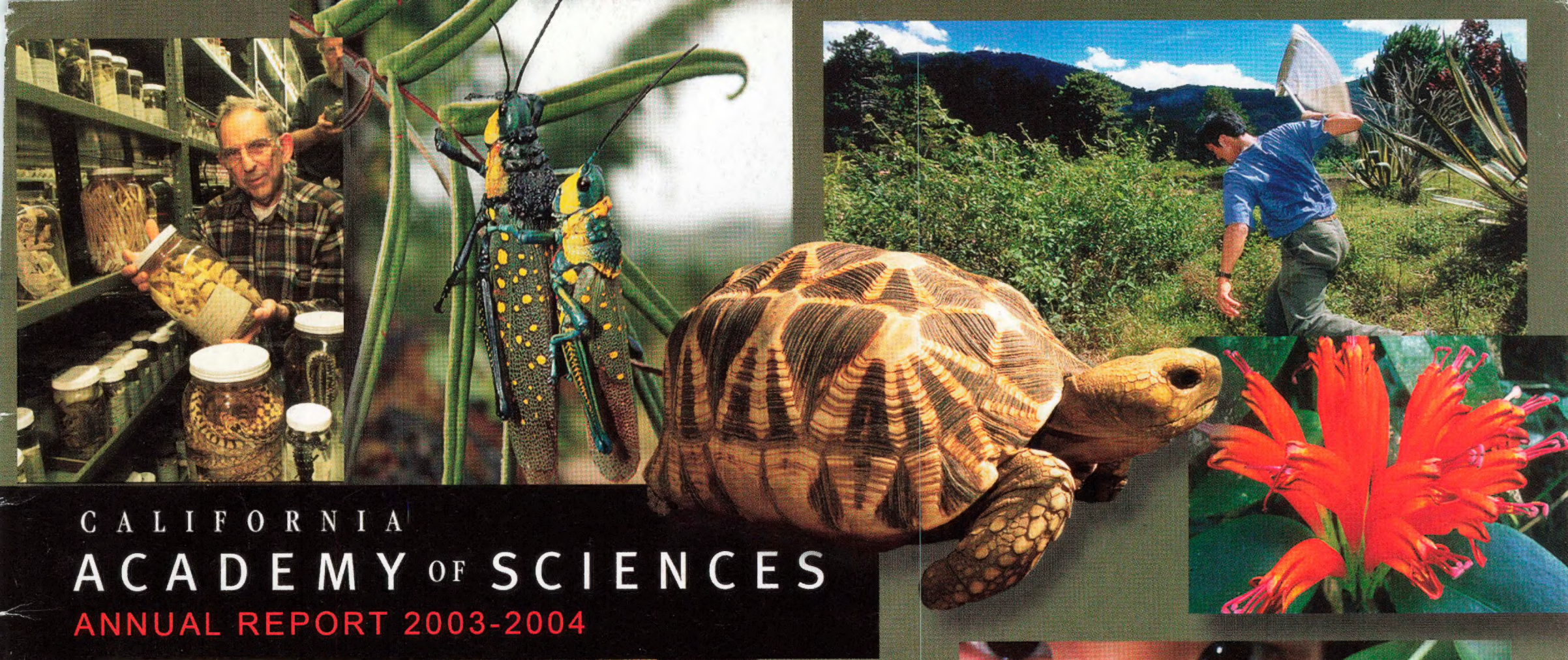




CALIFORNIA
ACADEMY OF SCIENCES
ANNUAL REPORT 2003-2004





Founded in 1853 as the
first scientific institution
in the West,
the California Academy
of Sciences' mission is
to explore and explain
the natural world.

Why do really big tortoises tend to be found only on islands?
Entomology is the study of insects, spiders and their relatives
Herpetology is the study of reptiles and amphibians
Extinction happens when the last survivor of a species dies

ACKNOWLEDGEMENTS

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Except:
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A NEW BEGINNING AT THE ACADEMY

THIS HAS BEEN A YEAR OF GREAT PROGRESS and extraordinary success at the Academy. We said “Goodbye for now” to one home and said “Hello” to a new one at 875 Howard Street. Through hard work, creativity and the commitment of Academy staff and supporters we transported over 18 million specimens, including over 5,000 living specimens, as well as Academy staff and equipment from Golden Gate Park to downtown San Francisco. What once stood as a vacant warehouse on Howard Street is now a vibrant new Aquarium and natural history museum—a home for hands-on science education experiences and vital biodiversity research.

On June 19, the Academy at 875 Howard Street “went public” with a series of celebratory events officially opening the museum, and the public’s response was overwhelmingly positive. The move to Howard Street was a great step toward the future, and we look forward to reaching out to new communities and continuing to develop partnerships with other downtown cultural organizations over the next four years.

The new museum at Howard Street embodies the spirit of innovation that has been at the heart of the Academy since its inception 151 years ago. Our new location is just the beginning of an evolution that will continue for the next four years as we explore and evaluate new approaches to our programming and exhibitry. The public floor of the Academy today is a flexible learning laboratory for testing new interactive exhibits such as *Ants: Hidden Worlds Revealed*. Informed by the work



PATRICK KOCIOLEK
Executive Director

of Academy researcher Brian Fisher, *Ants* integrates living species with video technology to deliver dramatic insights into the important role this industrious insect plays in the world of biodiversity.

Designed to reveal the physical infrastructure and day-to-day operation of an aquarium, the new Steinhart offers behind-the-scenes viewing seven days a week and Aquarium staff are often on the museum floor, feeding the fish, checking the tanks, and ready to answer your questions. The Astrobiology exhibit on the second floor invites visitors to explore an exciting new discipline that examines the types of extreme environments capable of supporting life beyond our own planet.

The move to Howard Street is a dramatic first step toward a more collaborative and cutting-edge institution that integrates the core elements of the Academy: research, education, exhibits and public programming. It is the generosity of our supporters that fuels this effort, and empowers the Academy to evolve and improve its programming to better serve our community. With your support, we will continue to be a home for innovation and discovery for the next four years as we build toward the spectacular new California Academy of Sciences.

Message from Chairman of the Board, W. Richard Bingham

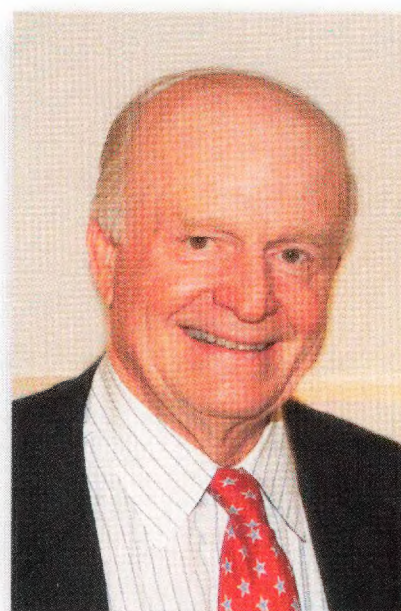
THANK YOU FOR ALL YOU DO

THIS IS AN EXCITING TIME AT THE CALIFORNIA Academy of Sciences.

The accomplishments outlined in this Annual Report are a direct result of our members, friends and donors. On behalf of the entire Academy, we thank everybody who has helped. As the Academy moves forward with its dramatic transformation into the most advanced natural history museum in the world, we reflect on those that have made all of this possible. From Academy staff and volunteers to our generous supporters and the leadership of the Board of Trustees, we owe a lot to many people.

While the Academy continues to modify and improve its programming, its commitment to science education and global research remains at the heart of our mission. That is what our move to Howard Street and the new building we are constructing in Golden Gate Park are all about. The many in-house opportunities for education, including the *Naturalist Center* and the *Early Childhood Education Space*, and hands-on exploration and science programming, onsite and off, will reach over 105,000 students in the Bay Area, in each of the next four years.

The Academy's eight research departments continue to document a multitude of species in the world's "hotspots" of biodiversity. Educating the public about the importance of studying and protecting biodiversity is an Academy priority, and is evidenced in exhibits such as *Ants: Hidden Worlds Revealed*. Another exam-



W. RICHARD BINGHAM
Chairman of the Board

ple is educational programming such as the Bay Area Ant Survey, a project for children and adults to help document the biodiversity of ants in the Bay Area while teaching local teachers and students about spec-

imen collection, identification, and data analysis.

Because of the commitment of our supporters, the Academy was able to deliver science education programming to over 300,000 people last year. Thanks to this philanthropic spirit the Academy created a new home for scientific discovery in the heart of downtown San Francisco and continues to document biodiversity around the world. We look forward to even greater strides in the coming year as we continue to explore new approaches as a natural science museum and deliver science education experiences to our community.

Thank you for supporting the California Academy of Sciences. None of this would be possible without your support.

A YEAR OF TRANSFORMATION AT THE ACADEMY

Beginning with the planning and execution of our move from Golden Gate Park to 875 Howard Street, much was achieved in a very short period of time. Academy staff and volunteers worked diligently and creatively to transform an empty office building into a home for exciting experiences of the natural world—from cutting edge exhibits to new Centers for learning.

While the physical move to Howard Street shaped much of the past year, the Academy continued to deliver critical programming to the public both in Golden Gate Park and at 875 Howard Street. In September, we launched *Arctic National Wildlife Refuge: Seasons of Life and Land*, our final exhibit at the “old” Academy. The exhibition was composed of 49 extraordinary large-format photographs by Subhankar Banerjee of the indigenous people, mammals, birds, plants, and landscapes of the Arctic National Wildlife Refuge. The exhibit focused on bringing to light the stunning beauty of this refuge so the public could have a better understanding of what natural splendors are at risk. The exhibit drew extensive media coverage, bringing the message of the photographs to a national audience.

Leaf cutter ant from the exhibit *Ants: Hidden Worlds Revealed*.



Ants: Hidden Worlds Revealed our featured new exhibit at 875 Howard Street, is a remarkable example of our new approach to programming. Building on Academy resources in a truly integrative fashion, *Ants* takes our research strength and creates linkages between research and animal husbandry efforts as well as the work of the exhibits staff and a team of designers. *Ants* also has a strong educational component, as reflected by the Bay Area Ant Survey Kits, devel-

oped through the Academy’s Teacher Services Program. Many species of ants remain undocumented in California and the Ant Survey Kit encourages the public to get involved in meaningful scientific research.

The Naturalist Center is a public centerpiece for integrating research and education. A melding of library, education and research functions, the Center serves as



Musk oxen seen through ice and fog from the exhibit *Arctic Refuge: Seasons of Life and Land*.

the entry point for visitors of all ages and levels of expertise with questions about the natural world. Staffed by both librarians and educators, the Naturalist Center houses the library’s general reference materials and lending collection, as well as a new reference collection of natural history specimens. The Center also offers “science in action” for the public, bringing research staff and technicians to the public floor and encouraging visitors to participate in both scheduled and drop-in activities.

First and foremost, the Academy is a science institution. As such, we are constantly striving to improve through testing and experimentation. Rather than using the four year transition period at Howard Street as a time for a “holding pattern,” we are working to raise the bar for a natural history museum, learning innovative, more efficient and exciting ways to explore and explain the natural world.

The Academy On the Move

A NATURAL TRANSITION

After 151 years studying the evolution of the world's flora and fauna, it is only natural that the California Academy of Sciences has embarked on a transformation of its own. While historic, the Academy's Golden Gate Park facility had deteriorated to an unacceptable degree and its antiquated design did not support dynamic multidisciplinary exhibits that capture the impact of science. The move to Howard Street and the rebuilding of a new home in the park are dramatic milestones and signal the rebirth of

one of San Francisco's most cherished institutions into a more collaborative and cutting edge Academy.

As the community looks toward a bright future, many took a final look back at the buildings that have housed so many memories of personal discovery and inspiration since we moved to the park 87 years ago. Over the final three days of 2003 the Academy offered free admission and extended hours. More than 38,000 people came to say farewell—until next time.



Above: Preparing to transport the Academy's 500-pound giant sea bass from Golden Gate Park to Howard Street.

Opposite: Herpetologists wrap tortoise carapaces for transport.

DID YOU KNOW?

- The Academy's collections consist of over 18 million scientific specimens, ranging from microscopic algae to whale skeletons, all of which were transported from Golden Gate Park to Howard Street.
- Each of the Academy's research departments—Anthropology, Aquatic Biology, Botany, Entomology, Herpetology, Ichthyology, Invertebrate Zoology & Geology, and Ornithology & Mammalogy had to safely pack their rare specimens to preserve their integrity.
- The Ornithology and Mammalogy Department alone packed and transported more than 130,000 specimens: from stuffed bats and dolphin bones to chimp skeletons, tiger pelts, mockingbird eggs, and the largest collection of Galápagos birds outside Ecuador.



“So far as is known,
no museum in the world
has ever undertaken
a move of this scope.”

—PATRICK KOCIOLEK, *Executive Director*

- In September of 2003, 875 Howard Street was only a shell—in just 9 months, we created a 10,000-square-foot Aquarium, 15,000 square feet of other exhibitions, and built out a total of seven floors, with over 200,000 square feet.
- Six moving trucks made a total of 690 trips over a six month period to complete the move.
- Approximately 600 species of living fishes and reptiles made the move.
- Most of the snakes—those under two feet long—were transported in socks. Larger snakes made the trip in large cloth bags, and many of the boa constrictors traveled in commodious burlap sacks, chosen to reduce any trauma.
- The aquarium’s oldest fish, a 65-year-old Australian lungfish named Methuselah, made the trip very carefully escorted by Frank Glennon, his keeper for nearly 30 years.
- The penguin’s new habitat has four times more water than their previous home.
- On Howard Street, the Academy constructed the largest Army Ant exhibition ever built. The two-story, 20,000-gallon Coral Reef tank circulates over 1.8 million gallons of water daily.
- The Academy donated many items from the Golden Gate Park building to educational and other not-for-profit groups.

The Academy On the Move



BETWEEN DECEMBER 29 AND DECEMBER 31, 2003, over 38,000 visitors came to say “goodbye for now.” In addition to farewell glances at favorite exhibits, many took the time to express in writing their thoughts and memories of museum buildings that have served visitors since 1916.

Dear Academy, I remember way back in the early '50s coming to visit. I ♥ you. I always will. I brought my children like my parents and now as a teacher I bring my students. They'll remember, too.

PATRICK GALLEGUILLOS



Thank you for the inspiration and nurturing our scientific roots! Blessings for continued success and many more moments of learning.

THE TERHORST STEELE FAMILY



Through the Academy, we were able to introduce our young children to the wonder of science! Looking forward to years and years of wonderment! Thank you!

THE MEADOW FAMILY



After taking classes with my mom, I took a great class where we make our own dioramas—just like in the museum! Seeing the masses of insect specimens stored behind the scenes was really impressive too.

LISA VOGT



When I came to live in SF from Guam in 1974,
my mom took me to the Academy of Sciences and I loved it— I've been coming back ever since, now with my husband and daughter. Thank you for all the education and entertainment!

CINDY N. WALS



My two boys both call this “my museum.” I think that's cool. We have spent many fun days here.

CAROL L. MAITER

My one-year-old son, Emil, loves nothing more than spending his museum time climbing up to the dioramas in the African Hall. It is for him, I hope, the beginning of a long lifetime of pleasure in the museum. I can only imagine all the thousands of anthropologists who started out just like that.

MICHELLE HART



I remember the time that I met Brian Gibeson, Director of the Junior Academy. He welcomed me to the classes even though I am disabled. I have taken all the classes and have worked and volunteered at the Biodiversity Resource Center for 17 years. I am now studying to be a marine biologist.

NYRI SCANLON



I grew up in a large family of 10 children and I remember coming to the Academy with my family as a child growing up in the 50's. It was sheer magic. I fell in love with science. I then grew up and spent a 30 year career teaching elementary school in SFUSD. Every year I brought by students to the Academy so they could experience the wonders of science as I had as a child. Thanks for the memories.

ESHTER VIGIL SVEN



The Cal Academy gave me my first opportunity working in the world of museums. I'm in love with my industry and have the evaluation and exhibit staff to thank!

JULIA BERGER

Steinhart Aquarium On the Move

THE INDUSTRIAL ENVIRONMENT OF OUR NEW HOME provides an opportunity to create a rare aquarium experience. Not only can we see the diversity and beauty of the Steinhart's inhabitants on display, the pipes, dials and various mechanisms that power the Aquarium have been revealed, providing behind-the-scenes viewing.

From the feeding of the alligator gars, to the monitoring of life support systems, visitors have the opportunity to interact with Aquarium staff as they conduct their work. This interactive approach gives visitors a sense of involvement with the exhibits, and conveys the skilled husbandry involved in sustaining such delicate environments.

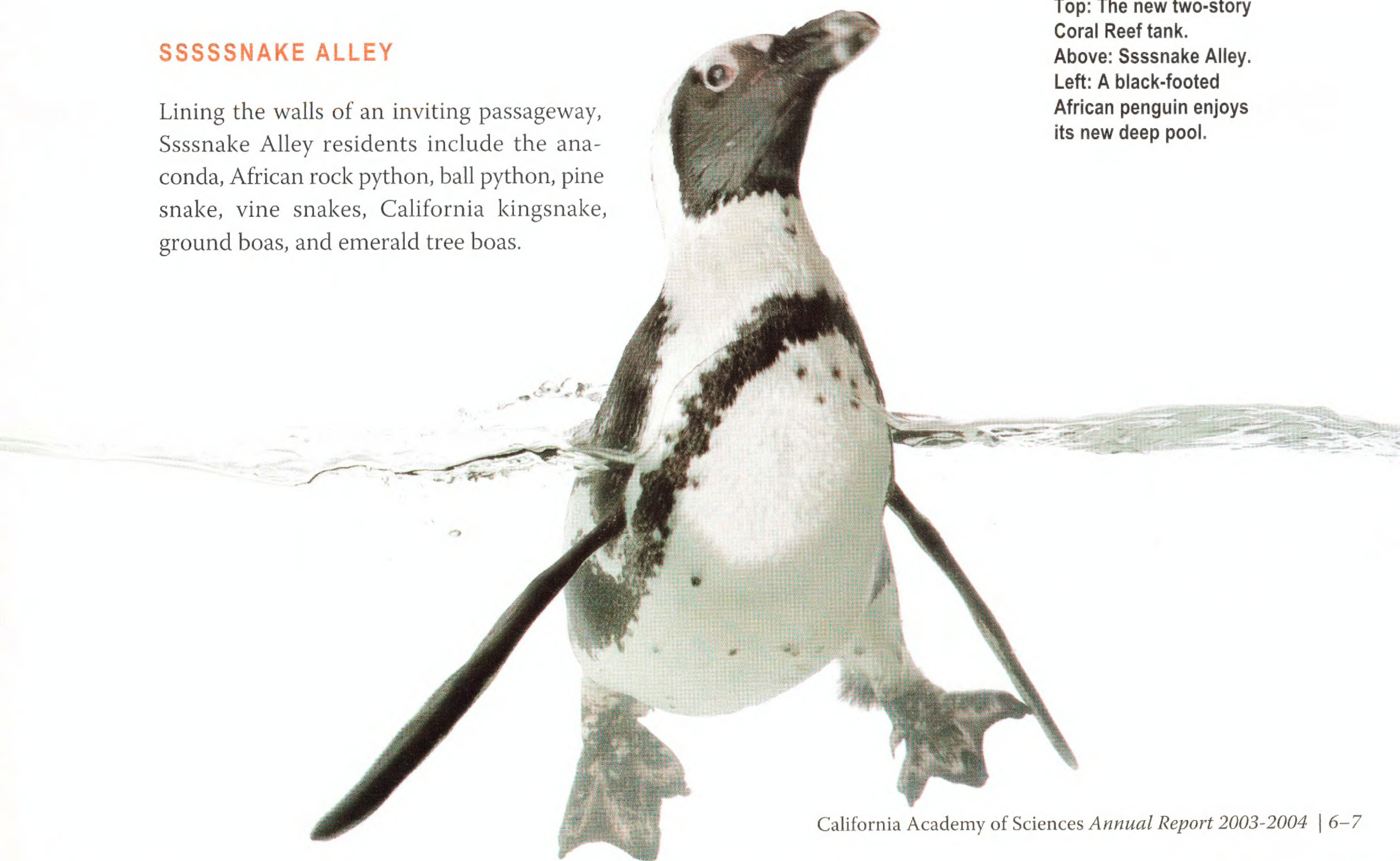
A visit to the Aquarium will enable you to get an up-close look at sturgeon, giant sea bass, alligator snapping turtles, gars, and moray eels. Children and adults love touching the sea stars, urchins, and hermit crabs at the Touch Tide Pool. You can enjoy the famed Steinhart penguins as they preen on land and swim underwater, and take in a penguin feeding, occurring every day at 11 a.m. and 3:30 p.m.

SSSSSNAKE ALLEY

Lining the walls of an inviting passageway, Ssssnake Alley residents include the anaconda, African rock python, ball python, pine snake, vine snakes, California kingsnake, ground boas, and emerald tree boas.



Top: The new two-story Coral Reef tank.
Above: Ssssnake Alley.
Left: A black-footed African penguin enjoys its new deep pool.



A LEARNING LABORATORY

SINCE JUNE 2004, THE MUSEUM'S PUBLIC floor has been abuzz with activity as visitors delve into multifaceted experiences of discovery—from six species of living ants to African penguins, massive pythons and snapping turtles. From Science NOW, an interactive station displaying the latest discoveries by Academy scientists and headline news about the natural world, to daily activities in the education classroom and the Naturalist Center, the Academy provides the resources to take visitors on a voyage of discovery.

Our downtown museum is a “learning laboratory” where we are exploring new approaches as a natural history museum. The next four years will serve as a model for the new California Academy of Sciences in Golden Gate Park, as we employ a more interactive and exploratory approach to programming. We hope you will come often to experience new journeys of discovery at 875 Howard Street.

ANTS: HIDDEN WORLDS REVEALED

CURATED BY ACADEMY SCIENTISTS, *Ants: Hidden Worlds Revealed* showcases six living colonies of ants, each of which displays unique nest building and food collecting behaviors. In this innovative exhibit, visitors can watch as Leaf Cutter ants grow a garden of fungus, Honey Pot ants swell their abdomens into gold-tinted storage units, and Army ants march across a bed of sand to prey upon live crickets. An overhead video screen provides amplified views of these activities to reveal how these fascinating insects really live and work.

Visitors to the *Ants* exhibit are encouraged to become researchers themselves by picking up an ant collecting kit from the Academy's Naturalist Center. After collecting specimens and returning them to the Academy along with a sheet of geographical data, each participant's results are added to the project map and Web site, online at www.antweb.org.

Visitor Dominique Corbett expressed it well: “I tell all my friends about the *Ants* exhibit—no one believes that ants are cool, but they are the coolest things in the world, when you have that many of them.”



Cast of a fire ants' nest.
Top, right: A bridge
made from the live
bodies of army ants.



ASTROBIOLOGY: LIFE IN THE EXTREME

ASTROBIOLOGY: LIFE IN THE EXTREME explores extreme habitats, drawing parallels between Earth's extreme environments and those on other planets and moons. The exhibit encourages visitors to explore the types of environments that would be capable of supporting life beyond our own planet, by studying the limits of life here on Earth. Extreme environments, such as thermal springs and hydrothermal vents, that host living organisms are examined in detail, presented in video, and supported by Academy specimens, including a moon rock.

THE NATURALIST CENTER

LOCATED ON THE SECOND FLOOR, THE *NATURALIST Center*, a transformation of the Biodiversity Resource Center, is a portal to Research, Education and the Academy Library, fostering in-depth inquiry at all levels. In addition, this versatile center provides educational activities for children ranging from species identification to owl pellet dissections. Adults and children enjoy the science-based programming of the Naturalist Center and take advantage of the center's reference collections of natural history specimens and library materials to answer their questions about the natural world.



Top: A busy Naturalist Center.
Above: A docent interprets the
Astrobiology exhibit.

The Public Floor

THE NATURE NEST PLAYSPACE

THE SECOND FLOOR OF THE ACADEMY'S HOWARD Street building includes a special place for young children. This fun and informative area includes live animal tanks and soft cushions inviting kids to take time for a story. The infant-toddler area provides non-walkers with a safe place to crawl. Our youngest visitors enjoy exhibits they can manipulate, soft elevations to climb and a floor-level fish tank to view.

CLASSROOM

DESIGNED BY ARTIST MARK DION, THE EDUCATION classroom is a unique learning environment that accommodates a number of in-depth education presentations each week and showcases treasures from the Academy's past.

PUBLIC PROGRAMS

PUBLIC PROGRAMS PRODUCED and delivered over one thousand hours of live programming for over 35,000 Academy visitors during the fiscal year 2003-2004. Among the many major projects were Latino Heritage Month, American Indian Heritage Month, Home School Day, and Opening Day programming at the Academy's 875 Howard Street site.



Left to right from top:
Nature Nest for the very youngest naturalists

New Howard Street Classroom

Hands-on experiences at the new Naturalist Center

On Opening Day, Academy supporters parade to Howard Street from Yerba Buena Center

Native American dancer in African Hall on December 31, 2003, Closing Day in Golden Gate Park.

Education at Howard Street and Beyond

THE ACADEMY'S EDUCATION DIVISION IS committed to inspiring a sense of wonder, understanding and stewardship of the natural world, and in so doing, helping create an informed and engaged public. Over the past year, Academy education programming has continued to evolve to take full advantage of the new museum.

The result is programming that emphasizes an interactive, exploratory approach, and makes use of real objects, including live organisms. While much has changed physically in the past year, the key element of Academy programming remains our cadre of educators, whose presence on the public floor enriches visitors' experiences.

Education's impact extends well beyond the museum at Howard Street. Throughout the year, Academy educators have been reaching into the community to deliver science-based activities to children, families, teachers, adults, and especially to students from ethnic, cultural, economic and geographic groups that traditionally have been underrepresented in the sciences. The next four years will also be a time to prototype programming, both onsite and offsite, designed to help lead us to the new Academy and remain a world-class leader in informal science education.

Recent studies have shown a troubling decline in the number of American students training to be scientists. Through programs such as Careers in Science and the many other programs listed here, the Academy is playing a vital role in helping to attract students to the excitement and importance of science and helping to train the next generation of scientists.

The **Teacher Services Program** provides science educators in the Bay Area and beyond with resources, training, and materials to enhance their classroom teaching and includes BioForum, an intensive, all-day symposium series, workshops, the Museum as the Classroom Project, and Educator Resource Materials lending kits.

The **Lecture Program** provides stimulating forums for the public to listen to and take part in dialogs with scientists, science writers, educators, and artists about environmental and scientific issues. The program includes Conversations at the Herbst Theatre, the Benjamin Dean Lectures, the Leakey Speaker Series on Human Origins, and monthly Members' Lectures.

*I cannot say enough about
how effective this educator
resource materials kit,
Concepts of Evolution: Activities
for the Classroom, was and
how much my students and
I enjoyed and learned from it.
I think that the teacher workshop on
concepts of evolution is
perhaps the best professional
development that I have
ever participated in.*

TIMOTHY HOCKENOS
High School Life Sciences Teacher
South San Francisco, CA



*My students loved the Fish
Evolution Over Geologic Time game
from the Educator Resource
Materials kit, Concepts of Evolution:
Activities for the Classroom. We
played for two entire class periods.*

GINA SCHILLING
7th Grade Life Sciences Teacher,
Hercules, CA



*The teacher workshop on
evolution is probably one
of the best—if not the best
one-day workshop
I have attended in
my 36 years of teaching.*

REN WAKEFIELD
High School Life Sciences Teacher,
Chico, CA

Education at Howard Street and Beyond

The **Early Childhood Education Program** helps children kindergarten-age and younger become ready to learn about the natural world through creative play. It includes a safe playspace with science and nature-themed learning materials and Educator Resource Materials lending kits for teachers.

The **Field Studies Program** provides teachers and students with opportunities to participate in ongoing ecological monitoring projects and includes the Mountain Lake Research Project, the Settling Plate Project, and the San Francisco Bay:2K Project.

Academy Outreach Programs provide school children with hands-on science and environmental education, emphasizing concepts such as conservation and biodiversity, and include Wild City! for elementary classes from underserved communities and EOS (Earth-Ocean-Space) Outreach to all grade levels and community-based organizations.

The **Careers in Science Program** seeks to diversify the scientifically-literate work force in America by providing high school and college students from groups traditionally underrepresented in the sciences with opportunities to learn about basic science concepts and explore potential science and education careers in an authentic, paid work environment.

Youth and Adult Courses educate and inspire interest in the natural world and include Junior Academy (science education for children), adult classes and field trips, and workshops and field trips for families.

Academy Docents provide tours to school groups and the public, offer behind-the-scenes tours of research departments, participate in outreach programming, act as facilitators at the Touch Tidepool, conduct demonstrations, and staff special highlight carts on the museum’s public floor.

Volunteers provide a range of services to the Academy, including assisting curators and collections managers in preparing scientific collections, aiding staff with administrative projects, and providing information to visitors.

EDUCATION PROGRAMS	
Total participants	316,908
Careers in Science Interns	8,145
<i>Cart demonstrations</i>	7,300
<i>Outreach</i>	45
<i>Fairs and festivals</i>	800
Docent Program	50,436
<i>School tours</i>	3,936
<i>Public tours</i>	3,624
<i>Facilitation</i>	41,000
<i>Home school days</i>	852
<i>Behind-scenes tours</i>	704
<i>Outreach</i>	320
Early Childhood Education	51,428
<i>Educator lending kits</i>	188
<i>Visitors to playspace</i>	51,240
Field Studies	312
Lectures	8,635
<i>Members</i>	1,605
<i>Conversations at Herbst</i>	4,418
<i>Special Lectures</i>	2,226
<i>Elderhostel</i>	180
<i>Global Warming Forum</i>	206
Naturalist Center Visitors	25,355
Teacher Services	4,429
<i>Bioforum</i>	433
<i>Workshops</i>	379
<i>Educator lending kits</i>	3,617
Touch Tide Pool Visitors (facilitated)	160,000
Wild City! and Outreach	6,896
<i>Wild City!</i>	490
<i>Wild Summer!</i>	93
<i>After-school programs and fairs</i>	1,043
<i>Fee-based outreach</i>	5,270
Youth and Adult Courses	1,272
<i>Junior Academy</i>	198
<i>Adult and Family courses</i>	1,074

RESEARCH ON THE MOVE

Planning for and execution of the Academy's successful move of the collections, laboratories, offices, and staff to the Howard Street facility was the major focus of the Research Division's efforts this past year. The new space necessitated some adaptability, and state of the art cabinetry was required for the Botany and Entomology collections to replace open-shelved compactor storage units that could not be relocated from Golden Gate Park. In addition, the relocation of all Academy collections stored in liquid (dilute ethyl alcohol) required specially designed and outfitted rooms and a revolutionary design for its shelving in the Howard Street facility to comply with new and much more stringent fire-code mandates.

Despite the emphasis placed on the move, the Academy's research programs in the field remained extremely active throughout the year. Academy scientists conducted field research around the Bay Area and at sites throughout California, across the United States, and in 19 foreign countries. Long-term multidisciplinary and multi-institutional collaborative projects in Madagascar, Myanmar (Burma), and Yunnan Province, China were advanced through one or more major Academy expeditions during the year. Results of these field studies included the discovery of more than one hundred species of plants and animals previously unknown to science and literally thousands of new distributional records for previously described species.

FEDERAL SUPPORT FOR RESEARCH

The National Science Foundation awarded seven new grants to the Academy during the year. Among these were: Partnerships for Enhancing Expertise in Taxonomy, a five-year grant for phylogenetic systematic research on nudibranch mollusks awarded to Terrence Gosliner; a Biodiversity Surveys and Inventories three-year grant to Brian Fisher for extending his study of ant diversity in Madagascar; and a Research Experience for Undergraduates, a four-year grant to Richard Mooi for continued support of the Academy's Summer Systematics Institute (SSI), which provided training and mentoring for eight undergraduate interns who

were selected from among more than 60 applicants from colleges and universities across the nation.

TRAINING AND EDUCATION

The Academy's joint graduate student training programs with Bay Area universities continued to flourish. Academy scientists supervised 18 graduate students in master's degree programs at San Francisco State University, two students in PhD programs at University of California, Davis, and served on advisory committees for numerous graduate students at these and other colleges and universities across the United States. Thanks to funds provided by the Lakeside Foundation, the Academy supported masters degree programs of two students, Anthony Macharia from Kenya and Jean Claude Rakotonarina from the Malagasy Republic. The foundation also funded visits by young scientists from Brazil, China, Madagascar, and Mexico during the year. In addition to the SSI interns, and with support from our Fellows, the Academy once again mentored an intern in scientific illustration, selected from among 24 applicants.

Charles Griswold sorts through leaf litter in hopes of adding new species to the Academy's extensive collection of spiders. His work further aids important biodiversity research in Yunnan, China.



LIBRARY

The Library continued its collaboration with Octavo Publishers to digitize a selection of our rare books. The CD versions of Hooker's *Pomona Londinensis* (1818) and Redoute's *Choix des plus belles fleurs* (1827-1833) were completed and made available for sale. The Library's copy of Mark Catesby's *Natural history of Carolina, Florida, and the Bahama Islands* (1754) was selected for scanning in April 2004 and the CD is now available.

Over 20,000 of the Academy's images are now available on the Manzanita Project's CalPhotos web site, whose database averaged a record 17,257 queries a day. Requests for images were received from 43 states and 27 countries.

The internal *Cumulus* database of archival images and photographs from recent expeditions proved extremely valuable in developing imagery for Howard Street exhibits.

It was used to locate and provide images for the Collage Wall and the Classroom exhibit, and enhance descriptions used in the Aquarium.



Above:
Nanisani,
a poisonous
beetle from Papua
New Guinea eaten by
birds discovered to
have the same poison in
their feathers.
Right: One of many orchids
seen by a CAS Expedition Team
in Gaoligongshan, China.



GROWTH AND USE OF COLLECTIONS IN
RESEARCH DEPARTMENTS 2003-2004

Department	Total Specimens Newly Accessioned	Total Specimens Loaned	Total Visitors
Anthropology	51	126	8
Botany	18,588	4729	370
Entomology	242,309	96,970	805
Herpetology	2,359	1,072	64
Ichthyology	8,298	4,061	215
Invertebrate Zoology & Geology	73,881	53,582	34
Ornithology & Mammalogy	1,004	557	76
Total Accessioned Holdings		17,885,981	

The New California Academy of Sciences Opens in 2008

A NEW HOME FOR DISCOVERY



Left: Bird's eye view of the new Academy, showing the Morrison Planetarium and the Rainforest.

Right: Artist's impression of the Swamp in the new Academy from Thinc Design.

THE NEW CALIFORNIA ACADEMY OF Sciences will be a home for discovery, where nature and architectural design commingle gracefully beneath a living, planted roof. With views throughout the building into Golden Gate Park, as well as collections and laboratories that are made visible to the public right on the museum floor, a major theme of the new Academy will be transparency—conveying the interconnectedness of science and the natural world itself.

Designed by renowned architect Renzo Piano, the new Academy will be the largest, most visited “green” building in the world; and the museum itself will be an exhibition about ecologically sound design, as the sustainable components of the building will be displayed throughout. The new Academy will be also be home to dramatic new exhibitions, from Tropical Rainforests to a Philippine Coral Reef. They will transport our visitors around the world, and enable them to



develop a deep understanding of the need to preserve Earth's diverse ecosystems.

The theme of integration will be the core of the new building's design. Researchers and educators, as well as aquarium and planetarium staff, will work in a multidisciplinary fashion to inform exhibit and education programming throughout the institution. In the new Academy, classroom space will triple, there will be a fully-equipped lab for educational programs, and a Naturalist Center where visitors will be able to engage in hands-on activities with specimens and use library reference materials. A greatly expanded Center for Biodiversity Research and Information will use advanced technology to enhance public access to our collections and information resources.

From iconic new exhibits and expanded education and collection facilities, the enhanced resources of the new Academy will tell important stories about conservation and biodiversity, while empowering millions to feel confident and competent as they engage in important scientific issues of the 21st century.

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Wil and Helen Wong at the Friends Dinner.

Helen and Wil Wong

As Academy Friends, we have had so many rewarding experiences over the years—from taking our children and more recently our grandson Max to the museum—to extraordinary trips through the Academy's travel program. One trip in particular we took with Academy scientist Jean DeMouthe on the Colorado River will be memorable for all of our lives. Not to mention Academy events, which are the best in town!

We have always been impressed with the extraor-

dinary talent of the Academy's staff and the work that goes on in all the departments. Getting to know specific staff members has been especially rewarding—Tomio Iwamoto, Luis Baptista, John McCosker, Terry Gosliner, Robert Orr, Nina Jablonski, and Jean DeMouthe.

Our experience with the Academy has been truly enriching. With the excitement of the new building and programs, we see ourselves becoming even more involved in the coming years.

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Colleen Prince and Melanie Hoefer, co-chairs of the 12th Annual Halloween Party.



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An Academy Guild Family Day outing at Pepperwood.



Anne Malley, Academy Librarian, shows Mayor Newsom a rare book at the Howard Street Opening.

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Gerald & Buff Corsi

"The Academy is close to my heart," says Buff Corsi. "When I first came here I was far away from my family, and the Academy became a big part of my life. I've been hooked on this museum ever since." It's no wonder Eastwood Associate Buff Corsi has fond feelings for the Academy, she found both of her true loves here—science, and her husband Jerry!

Buff has been involved at the Academy since 1964, but her most meaningful experience at the museum probably came when she met her future husband Jerry at an Academy photography class in 1975.

Today, they operate a stock photography business and have taken hundreds of thousands of nature-based photographs from around the world, including the Galápagos Islands, an area of particular interest for the Academy.

Their photos have appeared in hundreds of textbooks, magazines, and calendars. Each year the Corsis donate several thousand of these specially licensed photos to the Academy to enrich their collections and benefit the public. In addition to these photographic treasures, the Corsis support Academy programming as Eastwood Associates.

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Michelle McClellan

In February 2004, Michelle McClellan joined the Academy as Director of Development. Michelle has

been instrumental in the significant success of the Academy, overseeing the institution's fundraising efforts including the Campaign for the New Academy. Michelle joined the Academy from University of California, Berkeley, College of Engineering where she served as Development Director. Prior to her work at Cal, Michelle worked at the American Conservatory Theater in San Francisco.

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Dr. Evert I. Schlinger, Professor Emeritus at the University of California at Berkeley and an Academy Fellow, was awarded the 2004 Fellows Medal. Dr. Schlinger (center) flanked here by Dr. Charles Griswold and Dr. David Kavanaugh.

Dr. Schlinger has had a long and close association with the Academy, beginning nearly 50 years ago when he served as a field assistant to Dr. Edward S. Ross. During sabbatical leaves from UC Riverside and UC Berkeley, he made extensive entomological collections from Chile, Australia and New Zealand and deposited these in the Academy's collection. Even in retirement, he continues to add to the Academy

collections, with material mainly from southern Africa, New Caledonia and Madagascar. The Schlinger Foundation, which he serves as Chairman, has provided generous support to various institutions. At the Academy, the Foundation has funded a curatorial chair of arachnology and a postdoctoral fellowship and provided continuing support to the Entomology Department.

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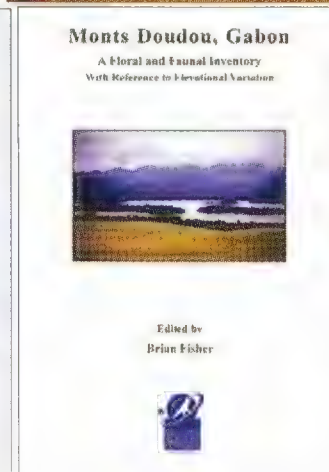
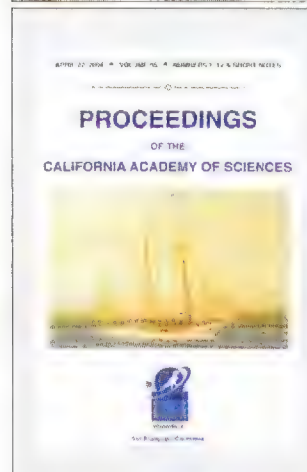
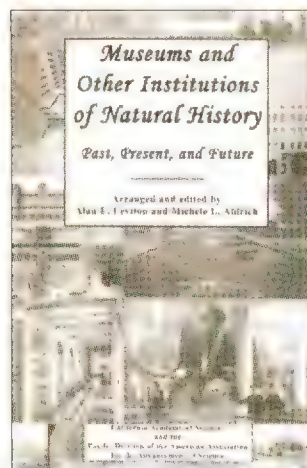
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EDUCATION DIVISION

Scientific Publications:

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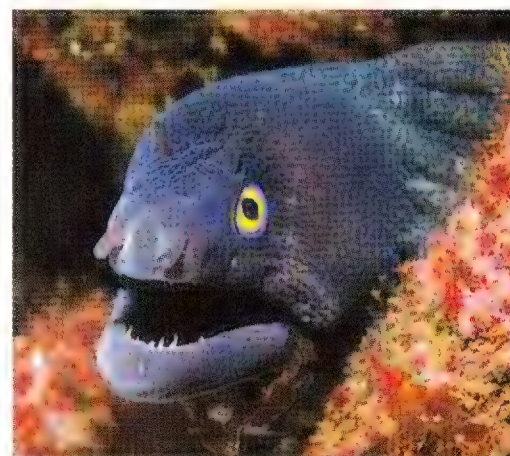
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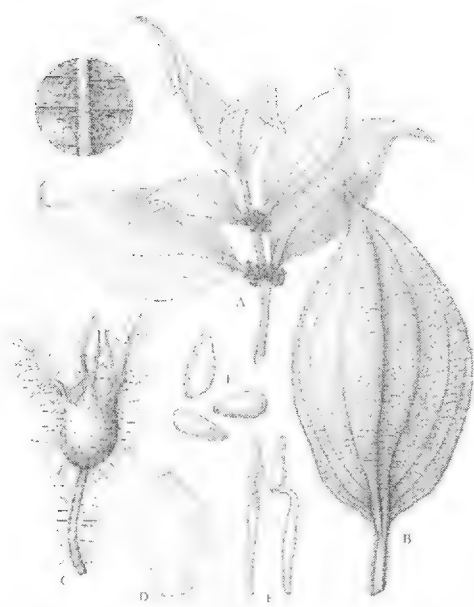
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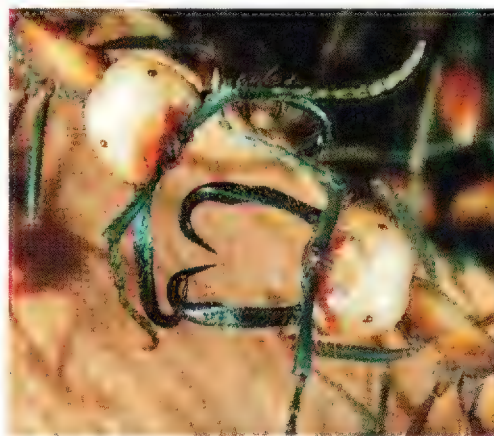
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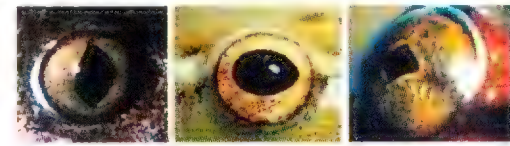
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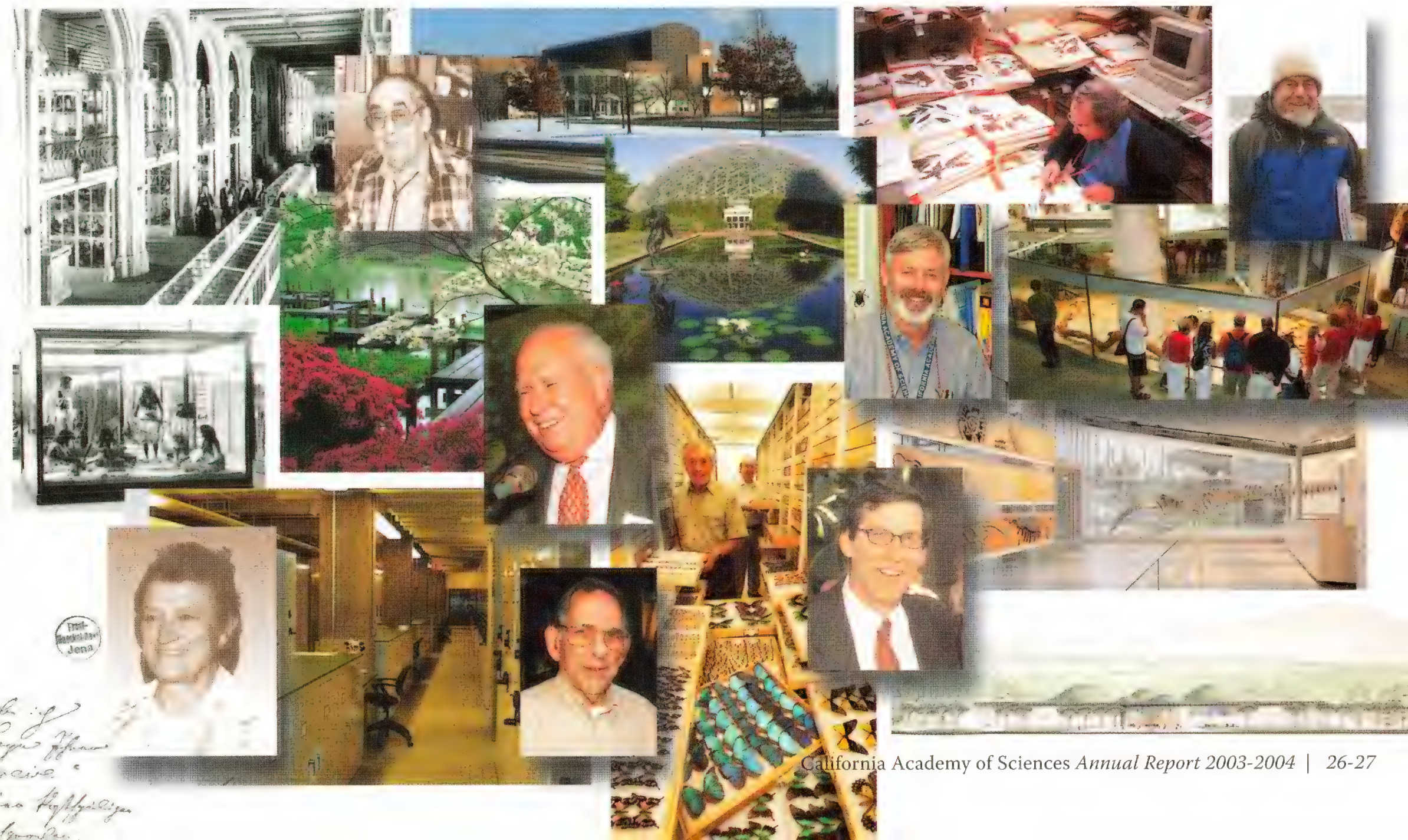
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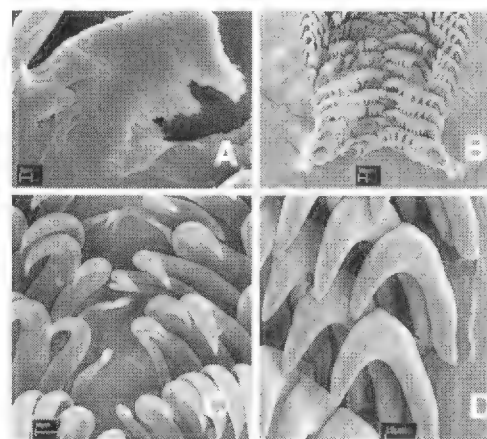
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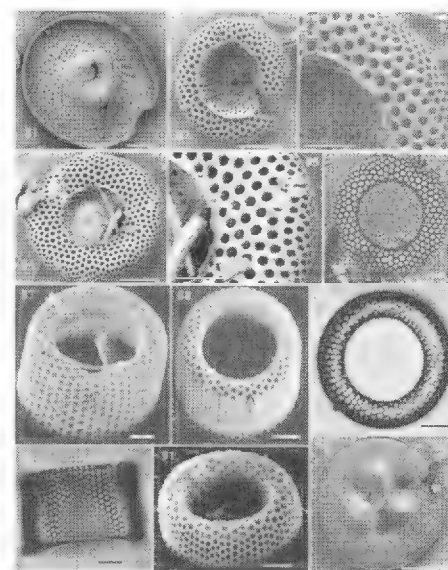
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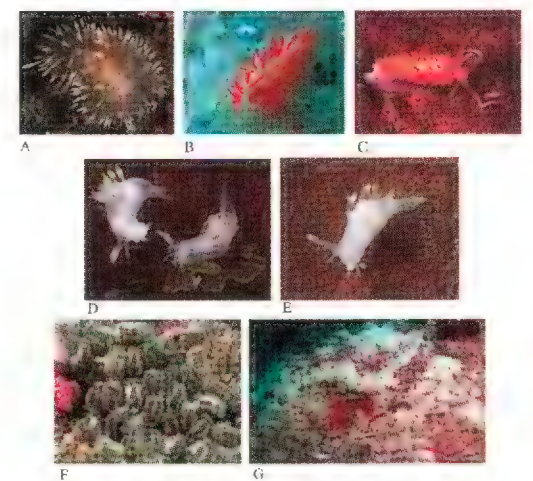
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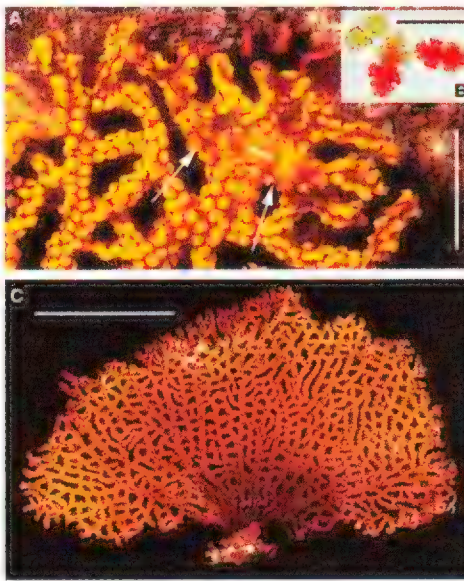
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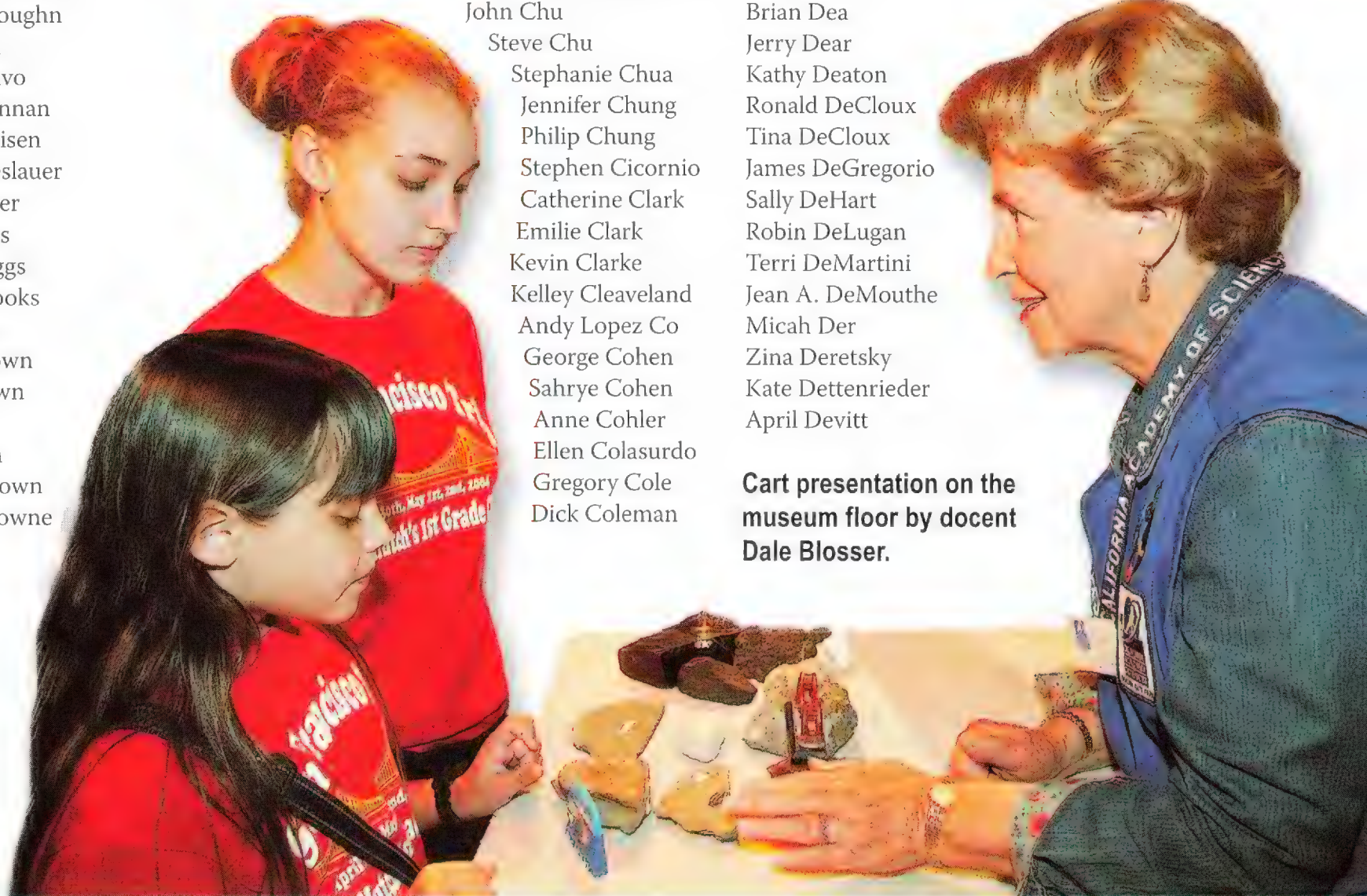
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Balance Sheet June 30, 2004 with comparative totals for 2003

Assets	Operating	Plant	Endowment	2004	2003
Cash & Equivalents	1,026,905	163,051		1,189,956	589,989
Investments in Marketable Securities	2,408,060	82,962,419	128,720,568	214,091,047	222,048,010
Receivables:					
Research Grants	160,290			160,290	213,267
Other Grants	36,761	1,664,150		1,700,911	4,343,875
Interest & Dividends		49,213	356,631	405,844	512,435
Other	169,854	723,492		893,346	605,028
Contributions	74,000	14,208,067	275,000	14,557,067	8,471,562
Due (to) from other funds	210,057	(2,307,734)	2,097,677		
Inventory	237,367			237,367	468,268
Prepaid Expenses	845,940	199,084		1,045,024	618,106
Investments Held in Trust			4,461,810	4,461,810	4,084,853
Restricted Cash		350,000		350,000	350,000
Deferred Bond Financing Costs, Net		3,390,471		3,390,471	3,508,401
Property & Equipment at cost, less Accumulated Depreciation		75,650,763		75,650,763	46,391,901
Total Assets	5,169,234	177,052,976	135,911,686	318,133,896	292,205,695
Liabilities & Net Assets					
Accounts Payable	1,371,122			1,371,122	501,100
Accrued Expenses & Other Liabilities	1,028,189	1,160,974	18,126	2,207,289	1,789,886
Deferred Income	185,397			185,397	145,373
Annuities Payable			1,338,759	1,338,759	1,373,743
Series 2003-A Bonds		65,000,000		65,000,000	65,000,000
Other Long-term Liability		226,154		226,154	
Total Liabilities	2,584,708	66,387,128	1,356,885	70,328,721	68,810,102
Unrestricted Net Assets					
Available for Operations	283,488	39,551,510	7,500,000	47,334,998	48,571,669
Invested in Property & Equipment		42,108,197		42,108,197	32,604,711
Designated for Endowments			85,359,222	85,359,222	78,350,976
Total Unrestricted Net Assets	283,488	81,659,707	92,859,222	174,802,417	159,527,356
Temporarily Restricted Net Assets	2,301,038	29,006,141	9,795,335	41,102,514	33,328,738
Permanently Restricted Net Assets			31,900,244	31,900,244	30,539,499
Total Net Assets	2,584,526	110,665,848	134,554,801	247,805,175	223,395,593
Total Liabilities & Net Assets	5,169,234	177,052,976	135,911,686	318,133,896	292,205,695

Statement of Activities Years Ended June 30, 2004 and 2003

Changes in Net Assets	Operating	Plant	Endowment	2004	2003
Revenue & Gains					
Admissions	1,376,095			1,376,095	2,392,750
Contributions	3,783,827	23,399,786	1,262,009	28,445,622	18,269,390
Memberships	576,825			576,825	875,944
Tuition & Program Fees	756,421			756,421	814,792
Auxiliary Activities	823,263			823,263	1,274,960
Government Grant Income	1,544,657	994,100		2,538,757	5,503,471
City & County of San Francisco	2,005,197			2,005,197	2,008,774
Investment Income	292,123	287,847	3,513,149	4,093,119	3,858,974
Net Realized and Unrealized Gains on Long-term Investments	(505)	(5,253)	13,832,458	13,826,700	(3,719,435)
Net Insurance Proceeds		352,452		352,452	
Total Revenue & Gains	11,157,903	25,028,932	18,607,616	54,794,451	31,279,620
Expenses					
Research	7,014,659	1,148,675		8,163,334	9,995,839
Public Programs	5,129,995	1,201,185		6,331,180	8,675,337
Aquarium	3,199,146	666,231		3,865,377	4,776,276
Development & Membership	2,711,183	933,675		3,644,858	3,365,189
Auxiliary Activities	1,141,657	127,995		1,269,652	1,703,373
Management & General	2,494,627	275,025		2,769,652	3,112,498
New Academy & Transition		4,340,816		4,340,816	2,700,667
Total Expense	21,691,267	8,693,602		30,384,869	34,329,179
Transfers Between Funds					
Capital Expenditures	(406,144)	406,144			
Other Transfers	11,380,785	(367,049)		(11,013,736)	
Increase/(Decrease) in Net Assets	441,277	16,374,425	7,593,880	24,409,582	(3,049,559)
Net Assets Beginning of Year	2,143,249	94,291,423	126,960,921	223,395,593	226,445,152
Net Assets End of Year	2,584,526	110,665,848	134,554,801	247,805,175	223,395,593

Operating Expenses: \$21.7 million

	\$ Millions	Percent
Management & General	\$2.5	11.5%
Auxiliary Activities	1.2	5.5%
Development & Membership	2.7	12.4%
Aquarium	3.2	14.7%
Public Programs	5.1	23.5%
Research	7.0	32.3%
	\$21.7	100.0

Operating Revenue & Transfer: \$22.5 million

	\$ Millions	Percent
Admissions	\$1.4	6.2%
Contributions	3.8	16.9%
Memberships	0.6	2.7%
Tuition & Program Fees	0.8	3.6%
Auxiliary Activities	0.8	3.6%
Government	3.5	15.6%
Invest. & Endowment Transfer	11.6	51.6%
	\$22.5	100.0

